



## Safety Data Sheet

---

### Section 1 – Chemical Product and Company Identification

---

**1.1 Product identifier:**

Product Name: GSP 1326-3LV Part A  
Product Code: 1326-3LVA  
Effective Date: 2/8/2016  
Revision Date: 6/6/2023

**1.2 Recommended use and restrictions on use:**

Product Use: Epoxy Resin  
Restrictions: Not available.

**1.3 Name, address, and telephone number of the chemical manufacturer:**

GS Polymers, Inc.  
3687-B Grapevine Street  
Mira Loma, CA 91752  
(951) 360-0607

**1.4 Emergency telephone number:**

24 Hr. Emergency CHEMTREC # 1-800-424-9300

---

### Section 2 – Hazards Identification

---

**2.1 Classification according to 29 CFR §1910.1200 (d):**

**Classification:** Skin corrosion/irritation - Category 2  
Eye damage/irritation - Category 2A  
Skin sensitization - Category 1  
Carcinogenicity - Category 1A  
Specific target organ toxicity - single exposure - Category 3  
Specific target organ toxicity - repeat exposure - Category 1

**2.2 Label elements according to 29 CFR §1910.1200 (f):****Hazard Symbols:**

**Signal Words:** Danger

**Hazard Statements:** Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause cancer by inhalation as dust.  
May cause respiratory irritation.  
Causes damage to lungs through prolonged or repeated exposure if inhaled as dust.

**Precautionary Statements:**

- Prevention:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Do not breathe mist/vapors/spray.  
Do not eat, drink or smoke when using this product.  
Wash exposed areas thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.
- Response:** If exposed or concerned: Get medical advice/attention.  
Get medical advice/attention if you feel unwell.
- If on skin: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Call a poison center/doctor if you feel unwell.
- Storage:** Store locked up.
- Disposal:** Dispose of contents in accordance with all local, regional, national and international regulations.

**2.3 Hazards not otherwise classified in the classification process:**

None known

**2.4 Ingredients (Present at  $\geq 1\%$ ) of unknown toxicity:**

None

**2.5 Supplemental Information:**

If product is in liquid or cured (solid) form, physical or health hazards listed related to dust are not considered significant. However, cutting or grinding of cured material may release microcrystalline silica (Quartz) which may present a chronic respiratory hazard. Lung damage, including silicosis, is known to occur from excessive inhalation of respirable crystalline silica

---

**Section 3 – Composition/Information on Ingredients**


---

**3.1.1 Hazardous ingredients(s)**

Chemical Name	CAS NO.	% (by wt.)
Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)	25068-38-6	50.0 – 75.0 %
Crystalline Silica (quartz)	14808-60-7	50.0 – 75.0 %

**3.1.2 Non-hazardous ingredient(s)**

Remaining components are non-hazardous and/or present at amounts below reportable limits.

**3.2 Trade secrets (if applicable):**

\* Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

---

**Section 4 – First Aid Measures**

---

**4.1 Description of first aid measures**

- Eyes:** Immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of entire eye surface and lids with water. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.
- Skin:** Remove contaminated clothing. Wipe off excess material from exposed area. Flush exposed area with water. Wash area with soap and water. Continue to rinse for at least 10 minutes. If skin irritation or rash occurs, get medical attention. Do not reuse clothing until clean. Contaminated leather articles including shoes cannot be cleaned and should be discarded.
- Inhalation:** Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if victim feels unwell. If victim is unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie belt or waistband.
- Ingestion:** Wash mouth out with water. If victim is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep victim's head low so that vomit does not enter the lungs. Call Poison Center or get medical attention immediately.

**4.2 Most important symptoms and effects, both acute and delayed:**

No data available

**4.3 Indication of any immediate medical attention and special treatment needed:**

No data available

---

**Section 5 – Fire-Fighting Measures**

---

**5.1 Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**5.2 Specific hazards arising from the product:**

If heated, a pressure increase will occur and the container may burst.

**5.3 Special protective equipment and precautions for fire-fighters:**

Use standard fire-fighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

---

**Section 6 – Accidental Release Measures**

---

**6.1 Personal precautions, protective equipment and emergency procedures:**

No action should be taken involving any personal risk or by personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**6.2 Methods and materials for containment and cleaning up:**

**Small spill:** Stop leak if it is possible to do without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of waste with a licensed waste disposal contractor.

**Large spill:** Stop leak if it is possible to do without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**Section 7 – Handling and Storage****7.1 Precautions for safe handling:**

Put on appropriate personal protective equipment (see section 8 of SDS). Individuals with a history of skin sensitization should not be employed in any process in which this product is used. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Section 8 – Exposure Controls/Personal Protection****8.1 Exposure Limits:**

Chemical Name	CAS NO.	OSHA (ACGIH) TLV
Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)	25068-38-6	Not Established
Quartz (respirable fraction)	14808-60-7	TWA 0.025 mg/m <sup>3</sup>

**8.2 Engineering Controls:**

**Ventilation:** Good general mechanical ventilation and local exhaust.

**8.3 Personal Protective Equipment:**

**Eye Protection:** Wear splash resistant safety goggles.

**Skin Protection:** Wear impervious gloves and other clothing to prevent contact.

**Respirators:** Organic vapor respirator if adequate ventilation is not present. (National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors recommended.)

**Hygienic Practices:** Wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling and storage areas. Food or beverages should not be consumed near where this product is stored. Remove and wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation

location.

**8.4 Additional Precautions**

Where cutting or grinding of the cured material is to occur, use adequate ventilation and dust controls. To minimize exposure, employees should wear respirator approved for silica dust. Do not breath dust. Do not rely on your sight to determine if dust is in the air. Use good housekeeping to avoid accumulation of dust in the work area. See also American Society for Testing and Materials (ASTM) Standard Practice E1132-99a, "Standard Practice for Health Requirements Relating to Occupational Exposure to respirable Crystalline Silica".

---

Section 9 – Physical and Chemical Properties

---

<b>Appearance</b> .....	Liquid
<b>Color</b> .....	Black
<b>Odor</b> .....	Slight, Ether-like
<b>Odor Threshold</b> .....	Not Established
<b>pH</b> .....	Not Established
<b>Melting Point/Freezing Point</b> .....	Not Established
<b>Boiling Point</b> .....	Not Established
<b>Flash Point</b> .....	>200°F (>93.33°C)
<b>Evaporation Rate</b> .....	Not Established
<b>Upper/Lower flammability or explosive limits</b> .....	Not Established
<b>Vapor Pressure</b> .....	Not Established
<b>Vapor Density</b> .....	Not Established
<b>Relative Density</b>	
<b>Specific Gravity</b> .....	1.47
<b>Bulk Density (lbs./gal)</b> .....	12.23
<b>Solubility</b> .....	Slightly Soluble
<b>Partition Coefficient; n-octanol/water</b> .....	Not Established
<b>Auto-ignition temperature</b> .....	Not Established
<b>Viscosity</b> .....	~ 100,000 cps

Note: Physical data presented above are typical values and should not be construed as a specification.

---

Section 10 – Stability and Reactivity

---

<b>10.1 Reactivity:</b>	Stable under normal conditions.
<b>10.2 Chemical Stability:</b>	Product is stable.
<b>10.3 Possibility of Hazardous Reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to Avoid:</b>	Extremes of temperature and direct sunlight.
<b>10.5 Incompatible Materials:</b>	Reactive or incompatible with the following materials: aliphatic amines, strong oxidizing agents, strong acids.
<b>10.6 Hazardous Decomposition Products:</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>10.7 Other Hazards:</b>	Reacts with considerable heat release with some curing agents.

---

 Section 11 – Toxicological Information
 

---

**11.1 Information on the likely routes of exposure:**

Not Available

**11.2 Symptoms related to the physical, chemical and toxicological characteristics:**

**Eye Contact:** Pain or irritation, watering, redness  
**Inhalation:** Respiratory tract irritation, coughing  
**Skin Contact:** Irritation, redness  
**Ingestion:** No specific data

**11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:****Short term exposure:**

**Eye Contact:** Causes serious eye irritation.  
**Inhalation:** May cause respiratory irritation.  
**Skin Contact:** Causes skin irritation. May cause an allergic skin reaction.  
**Ingestion:** Irritating to mouth, throat and stomach.

**Long term exposure:** Not Available**Chronic effects:** Not Available**11.4 Numerical Measure of toxicity (Acute toxicity estimates)****Acute Toxicity Data:**

Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)

LD50 Oral Rat 11,400 mg/kg

LD50 Dermal Rat 2,000 mg/kg

**11.5 Carcinogenicity:**

The National Toxicology Program classifies respirable crystalline silica as "known to be a human carcinogen". The International Agency for Research on Cancer has determined that crystalline silica is carcinogenic to humans (Group 1 - carcinogenic to humans)

---

 Section 12 – Ecological Information
 

---

**12.1 Ecotoxicity:** Not Available**12.2 Persistence and Degradability:** Not Available**12.3 Bioaccumulative Potential:** Not Available**12.4 Mobility in Soil:** Not Available**12.5 Other Adverse Effects:** Not Available

---

 Section 13 – Disposal Considerations
 

---

**13.1 Information on waste and methods of disposal**

Dispose of contents in accordance with all local, regional, national and international regulations.

---

 Section 14 – Transportation Information
 

---

**14.1 Transportation information**

<b>Land Transportation (DOT):</b>	Not Regulated in Non-Bulk Containers
<b>Sea Transportation (IMDG):</b>	
<b>Proper Shipping Name:</b>	Environmentally hazardous substance, liquid, n.o.s. (liquid epoxy resin)
<b>Hazard Class:</b>	9
<b>Identification Number:</b>	UN 3082
<b>Packing group:</b>	III
<b>Marine Pollutant:</b>	Yes
<b>Air Transportation (IATA):</b>	
<b>Proper Shipping Name:</b>	Environmentally hazardous substance, liquid, n.o.s. (liquid epoxy resin)
<b>Hazard Class:</b>	9
<b>Identification Number:</b>	UN 3082
<b>Packing group:</b>	III
<b>Environmental Hazard:</b>	Yes

**14.2 Transportation in bulk according to Annex II of Marpol 73/78 and the IBC Code:**

This product is not intended to be transported in bulk containers.

**14.3 Special precautions for transportation:**

No data available

---

 Section 15 – Regulatory Information
 

---

**15.1 Safety, health and environmental regulations specific for the product in question.**

This regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on regulatory matters.

**United States Federal Regulations:****US EPA CERCLA Hazardous Substances (40 CFR 302):**

Not Evaluated

**SARA Section 311/312 Hazard Categories:**

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

None above de minimis concentration

**State Right-To-Know Information:**

For details of your regulatory requirements you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

Crystalline silica (quartz) (MA, NJ, PA)

**California Prop. 65:** This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.

Crystalline silica (quartz) 50.0 -75.0 % (cancer)

Oxirane, 2-(phenoxyethyl)- < 1% (cancer)

---

## Section 16 – Other Information

---

### 16.1 Date of preparation or last revision:

Company: GS Polymers, Inc.

Rev Date: 6/6/2023

Rev By: BN

### Reason for Change:

Section 14, 16

### 16.2 Additional information:

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of GS Polymers' product safety program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on such matters.



## Safety Data Sheet

---

### Section 1 – Chemical Product and Company Identification

---

**1.1 Product identifier:**

Product Name: GSP 1326-3LV Part B  
Product Code: 1326-3LVB  
Effective Date: 2/8/2016  
Revision Date: 6/15/2023

**1.2 Recommended use and restrictions on use:**

Product Use: Epoxy Curative  
Restrictions: For evaluation only

**1.3 Name, address, and telephone number of the chemical manufacturer:**

GS Polymers, Inc.  
3687-B Grapevine Street  
Mira Loma, CA 91752  
(951) 360-0607

**1.4 Emergency telephone number:**

24 Hr. Emergency CHEMTREC # 1-800-424-9300

---

### Section 2 – Hazards Identification

---

**2.1 Classification according to 29 CFR §1910.1200 (d):**

**Classification:** Acute toxicity (oral) - Category 4  
Acute toxicity (dermal) - Category 4  
Skin corrosion/irritation - Category 1B  
Eye damage/irritation - Category 1  
Skin sensitization - Category 1  
Carcinogenicity - Category 1A  
Specific target organ toxicity - repeat exposure - Category 1 (Lungs)  
Hazardous to the aquatic environment - chronic - Category 2

**2.2 Label elements according to 29 CFR §1910.1200 (f):****Hazard Symbols:**

**Signal Words:** Danger

**Hazard Statements:** Harmful if swallowed.  
Harmful in contact with skin.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.

May cause cancer if inhaled as dust.  
Causes damage to lungs through prolonged or repeated exposure if inhaled as dust.  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements:****Prevention:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Do not breathe mist/vapors/spray.  
Avoid breathing mist/vapors/spray.  
Do not eat, drink or smoke when using this product.  
Wash exposed areas thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Avoid release to the environment.

**Response:**

If exposed or concerned: Get medical advice/attention.  
Get medical advice/attention if you feel unwell.

If swallowed: Call a poison center/doctor if you feel unwell.  
Rinse mouth.  
If swallowed: Rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If on skin: Wash with plenty of soap and water.  
Call a poison center/doctor if you feel unwell.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a poison center or doctor.

Collect spillage.

**Storage:** Store locked up.

**Disposal:** Dispose of contents in accordance with all local, regional, national and international regulations.

**2.3 Hazards not otherwise classified in the classification process:**

None known

**2.4 Ingredients (Present at  $\geq 1\%$ ) of unknown toxicity:**

None

**2.5 Supplemental Information:**

If product is in liquid or cured (solid) form, physical or health hazards listed related to dust are not considered significant. However, cutting or grinding of cured material may release microcrystalline silica (Quartz) which may present a chronic respiratory hazard. Lung damage, including silicosis, is known to occur from excessive inhalation of respirable crystalline silica.

---

 Section 3 – Composition/Information on Ingredients
 

---

**3.1.1 Hazardous ingredients(s)**

<b>Chemical Name</b>	<b>CAS NO.</b>	<b>% (by wt.)</b>
Tetraethylenepentamine	112-57-2	25.0 – 35.0 %
Crystalline Silica (quartz) <sup>†</sup>	14808-60-7	40.0 – 50.0 %
Triethylenetetramine	112-24-3	1.0 – 5.0 %
Pentaethylenhexamine	4067-16-7	1.0 – 5.0 %
Ethylenediamine	107-15-3	0.01 – 0.5 %

<sup>†</sup> Component is hazardous if present as a respirable dust. See Section 2.5 and Section 8.4

**3.1.2 Non-hazardous ingredient(s)**

Remaining components are non-hazardous and/or present at amounts below reportable limits.

**3.2 Trade secrets (if applicable):**

\* Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

---

 Section 4 – First Aid Measures
 

---

**4.1 Description of first aid measures**

**Eyes:** Immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of entire eye surface and lids with water. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

**Skin:** Remove contaminated clothing. Wipe off excess material from exposed area. Flush exposed area with water. Wash area with soap and water. Continue to rinse for at least 10 minutes. If skin irritation or rash occurs, get medical attention. Do not reuse clothing until clean. Contaminated leather articles including shoes cannot be cleaned and should be discarded.

**Inhalation:** Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if victim feels unwell. If victim is unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie belt or waistband.

**Ingestion:** Wash mouth out with water. If victim is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep victim's head low so that vomit does not enter the lungs. Call Poison Center or get medical attention immediately.

**4.2 Most important symptoms and effects, both acute and delayed:**

Eye disease. Skin disorders and allergies.

**4.3 Indication of any immediate medical attention and special treatment needed:**

No data available

---

 Section 5 – Fire-Fighting Measures
 

---

**5.1 Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**5.2 Specific hazards arising from the product:**

If heated, a pressure increase will occur and the container may burst.

**5.3 Special protective equipment and precautions for fire-fighters:**

Use standard fire-fighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

## Section 6 – Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures:**

No action should be taken involving any personal risk or by personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Prevent spilled material and runoff from contacting soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**6.2 Methods and materials for containment and cleaning up:**

Pick up spilled material and containerize for recovery or disposal. Using adequate protective equipment, add dry material to absorb spill (if large spill, first dike to contain). Dispose of waste with a licensed waste disposal contractor.

## Section 7 – Handling and Storage

**7.1 Precautions for safe handling:**

Put on appropriate personal protective equipment (see section 8 of SDS). Individuals with a history of skin sensitization should not be employed in any process in which this product is used. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities:**

Protect from temperatures below: Not Available  
Protect from temperatures above: Not Available

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8 – Exposure Controls/Personal Protection

**8.1 Exposure Limits:**

Chemical Name	CAS NO.	Exposure Limits
Tetraethylenepentamine	112-57-2	5 mg/m <sup>3</sup> (TWA):WEEL
Crystalline Silica (quartz) (respirable fraction)	14808-60-7	TWA 0.025 mg/m <sup>3</sup>

**8.2 Engineering Controls:**

**Ventilation:** Good general mechanical ventilation and local exhaust.

**8.3 Personal Protective Equipment:**

**Eye Protection:** Wear splash resistant safety goggles.  
**Skin Protection:** Wear impervious gloves and other clothing to prevent contact.  
**Respirators:** Organic vapor respirator if adequate ventilation is not present. (National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors recommended.)  
**Hygienic Practices:** Wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling and storage areas. Food or beverages should not be consumed near where this product is stored. Remove and wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

**8.4 Additional Precautions**

Where cutting or grinding of the cured material is to occur, use adequate ventilation and dust controls. To minimize exposure, employees should wear respirator approved for silica dust. Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Use good housekeeping to avoid accumulation of dust in the work area. See also American Society for Testing and Materials (ASTM) Standard Practice E1132-99a, "Standard Practice for Health Requirements Relating to Occupational Exposure to respirable Crystalline Silica".

Section 9 – Physical and Chemical Properties

<b>Appearance</b> .....	Liquid
<b>Color</b> .....	Tan
<b>Odor</b> .....	Slight, Ether-like
<b>Odor Threshold</b> .....	Not Established
<b>pH</b> .....	Not Established
<b>Melting Point/Freezing Point</b> .....	Not Established
<b>Boiling Point</b> .....	Not Established
<b>Flash Point</b> .....	>356°F (>180°C)
<b>Evaporation Rate</b> .....	Not Established
<b>Upper/Lower flammability or explosive limits</b> .....	Not Established
<b>Vapor Pressure</b> .....	Not Established
<b>Vapor Density</b> .....	Not Established
<b>Relative Density</b>	
<b>Specific Gravity</b> .....	1.40
<b>Bulk Density (lbs./gal)</b> .....	11.70
<b>Solubility</b> .....	Slightly Soluble
<b>Partition Coefficient; n-octanol/water</b> .....	Not Established
<b>Auto-ignition temperature</b> .....	Not Established
<b>Viscosity</b> .....	~5,500 cps

Note: Physical data presented above are typical values and should not be construed as a specification.

Section 10 – Stability and Reactivity

- 10.1 Reactivity:** Stable under normal conditions.  
**10.2 Chemical Stability:** Product is stable.

- 10.3 Possibility of Hazardous Reactions:** Reacts with oxidizing agents, strong acids, organic acids, sodium hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
- 10.4 Conditions to Avoid:** Extremes of temperature and direct sunlight.
- 10.5 Incompatible Materials:** Nitrosamines (carcinogen) may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentration.
- 10.6 Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- 10.7 Other Hazards:** Reacts with considerable heat release with some epoxy resins.

## Section 11 – Toxicological Information

### 11.1 Information on the likely routes of exposure:

Inhalation, skin contact, eye contact.

### 11.2 Symptoms related to physical, chemical and toxicological characteristics:

<b>Acute Toxicity:</b>	Harmful if swallowed. Harmful in contact with skin.
<b>Skin Corrosion/Irritation:</b>	Causes severe skin burns.
<b>Serious Eye Damage/Irritation:</b>	Causes serious eye damage.
<b>Respiratory or Skin Sensitization:</b>	May cause an allergic skin reaction.
<b>Germ Cell Mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	May cause cancer if inhaled as dust
<b>Reproductive Toxicity:</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure):</b>	Not classified
<b>Specific Target Organ Toxicity (Repeated Exposure):</b>	Causes damage to organs through prolonged or repeated exposure if inhaled as dust.
<b>Aspiration Hazard:</b>	Not classified

### 11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

#### Short term exposure:

<b>Eye Contact:</b>	Severe eye irritant.
<b>Inhalation:</b>	Not Available
<b>Skin Contact:</b>	Toxic in contact with skin. Severe skin irritant. May cause sensitization by skin contact.
<b>Ingestion:</b>	Not Available.

<b>Long term exposure:</b>	Not Available
<b>Chronic effects:</b>	Not Available

### 11.4 Numerical Measure of toxicity (Acute toxicity estimates)

#### Acute Toxicity Data:

ATE Oral (Product):	1244 mg/kg
ATE Dermal (Product):	1899 mg/kg

ATE values calculated using Appendix A.1.3.6 to 29 CFR §1910.1200

**11.5 Carcinogenicity:****International Agency for Research on Cancer (IARC)**

Crystalline silica      Group 1      Carcinogenic to humans

---

**Section 12 – Ecological Information**

---

<b>12.1 Ecotoxicity:</b>	Not Available
<b>12.2 Persistence and Degradability:</b>	Not Available
<b>12.3 Bioaccumulative Potential:</b>	Not Available
<b>12.4 Mobility in Soil:</b>	Not Available
<b>12.5 Other Adverse Effects:</b>	Not Available

---

**Section 13 – Disposal Considerations**

---

**13.1 Information on waste and methods of disposal**

Dispose of contents in accordance with all local, regional, national and international regulations.

---

**Section 14 – Transportation Information**

---

**14.1 Transportation information****Land Transportation (DOT):**

**Proper Shipping Name:** Tetraethylenepentamine  
**Hazard Class:** 8  
**Identification Number:** UN 2320  
**Packing group:** III  
**Marine Pollutant:** No

**Sea Transportation (IMDG):**

**Proper Shipping Name:** Tetraethylenepentamine  
**Hazard Class:** 8  
**Identification Number:** UN 2320  
**Packing group:** III  
**Marine Pollutant:** Yes

**Air Transportation (IATA):**

**Proper Shipping Name:** Tetraethylenepentamine  
**Hazard Class:** 8  
**Identification Number:** UN 2320  
**Packing group:** III  
**Marine Pollutant:** Yes

**14.2 Transportation in bulk according to Annex II of Marpol 73/78 and the IBC Code:**

This product is not intended to be transported in bulk containers.

**14.3 Special precautions for transportation:**

No data available

---

**Section 15 – Regulatory Information**

---

**15.1 Safety, health and environmental regulations specific for the product in question.**

This regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on regulatory matters.

**United States Federal Regulations:****US EPA CERCLA Hazardous Substances (40 CFR 302):**

Not Evaluated

**SARA Section 311/312 Hazard Categories:**

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

None

**State Right-To-Know Information:**

For details of your regulatory requirements you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

Crystalline silica (quartz) (MA, NJ, PA)

**California Prop. 65:** This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.

Crystalline silica (quartz) (cancer)

---

**Section 16 – Other Information**

---

**16.1 Date of preparation or last revision:**

Company: GS Polymers, Inc.

Rev Date: 6/15/2023

Rev By: BN

**Reason for Change:**

2/8/2016: Sections 2, 3 – GHS Classifications, 3.1.1, Section 8, 11, 14

**16.2 Additional information:**

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of GS Polymers' product safety program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on such matters.